

A GAS TURBINE COMBUSTOR

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ABSTRACT OF THE DISCLOSURE

10 A gas turbine combustor includes a side wall, for
defining a combustion volume, having upstream and
downstream ends, a pilot nozzle, disposed adjacent the
upstream end of the side wall, for discharging a pilot
fuel to form a diffusion flame in the combustion volume,
and a plurality of main nozzles, provided around the
pilot nozzles, for discharging a fuel-air mixture to form
15 premixed flames in the combustion volume. Film air is
supplied into the combustion volume downstream of the
main nozzles along the inner surface of the side wall to
reduce the fuel-air ratio in a region adjacent the inner
surface of the side wall and to restrain a combustion-
20 driven oscillation in the combustion volume.